UNIT 491

ANDREW MOLERA STATE PARK

DRAFT GENERAL DEVELOPMENT PLAN (not approved)

July 1976

DEVELOPMENT DIVISION

ANDREW MOLERA STATE PARK

RESOURCE MANAGEMENT PLAN AND GENERAL DEVELOPMENT PLAN

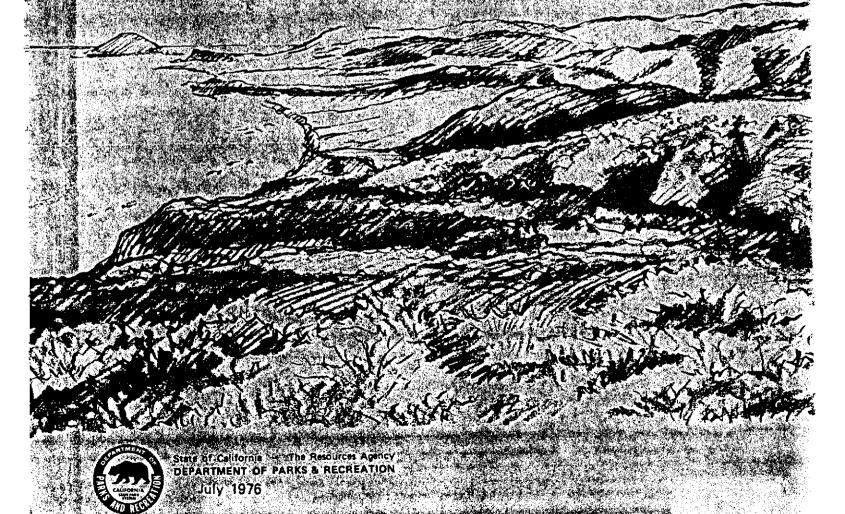
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Pe^{vised} Preliminary preliminary



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ANDREW MOLERA STATE PARK

RESOURCE MANAGEMENT PLAN AND GENERAL DEVELOPMENT PLAN

> Revised Preliminary July 1976

Edmund G. Brown Jr. *Governor State of California*

Claire T. Dedrick Secretary for Resources

Herbert Rhodes
Director
Department of Parks and Recreation



State of California — The Resources Agency Department of Parks and Recreation P. O. Box 2390, Sacramento, California 95811

Andrew Molera SP General Development Plan Status & Recommendations

The Monterey County Planning Staff and the Central Coastline Commission's staff are unified in their opposition to our preliminary General Development Plan for Andrew Molera State Park.

The plan was discussed at a June 9 meeting in Salinas with Bill Farrel and Nancy Sackman of the Monterey County Planning Department, Lee Otter of the Coastline Commission staff, Jim Blocker of Monterey County Parks, Chuck Mehlert, Jim Davis and George Rackelmann from our Department.

The main issue was the road and parking lot site location. The arguments pro and con, we have all heard several times. Such discussion is pointless to review because of the Coastline Commission's/the local coastal programs' power of permit authority over any development. The coastal program for the Big Sur coast area is not yet finished. Final conclusions have not been made and, therefore, the Coastline Commission will find something wrong with any proposal which would modify existing use and/or visual quality. In the case of Andrew Molera State Park, the Coastline Commission would judge our proposed parking lot to be a modification of existing use and an intrusion on visual quality and on that basis would oppose the General Development Plan. The County Planning Department would do the same.

I have reviewed a letter of June 13, 1977 by Jim Blocker, Assistant Director of Monterey County Department of Parks regarding the recreation deficiencies of our proposed plan for Andrew Molera State Park (attached). I have reviewed the Earl B. Smith, Director of Parks, memorandum to E. W. Demars, Monterey County Director of Planning, on the subject Big Sur pilot project - proposed master plan revisions pointing out the need to increase public recreation facilities (attached). I have briefly considered our State Parks capabilities to provide the public recreation access to the coast and I have briefly considered the apparent deficiencies of the public recreation access to the coast.

Based on these considerations and the informative letters, I recommend that the full development potential of Andrew Molera State Park be studied. Our current plan may have compromised away our Department's capability to respond to recreation needs in the Big Sur area.

I recommend the current preliminary plan be taken off the October Commission agenda for review and/or approval.

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FOREWORD

The purpose of the Andrew Molera State Park Resource Management Plan and General Development Plan is to provide guidelines for the responsible development and management of resources at Andrew Molera State Park now and in the future. To achieve this, a thorough inventory of all the cultural and natural resources of the park has been taken and a careful analysis of these resources has been made.

Using this comprehensive knowledge of the park in conjunction with an analysis of the recreation needs of the region, it was possible to decide upon a development plan that would take full advantage of the resources within the limitations imposed by ecological factors. The plan is flexible and can be adapted to unforeseen future changes.



SUMMARY

Andrew Molera State Park is one of several state parks in the Big Sur region of California. The park's 2,154 acres lie just 30 miles south of the city of Monterey. The area is nationally renowned for its scenic and cultural qualities.

The development of Andrew Molera State Park will expand recreation opportunities. An analysis of the natural and cultural resources at Andrew Molera indicated which areas can best accommodate public use. This long-range plan for development includes picnic facilities a parking area, trails, a hike-in primitive campground, and "potential public use areas" to be used in the future as appropriate to serve the public needs.

If this long-range plan were to be implemented in its entirety, the facilities developed would accommodate a total of 950 people.



INTRODUCTION

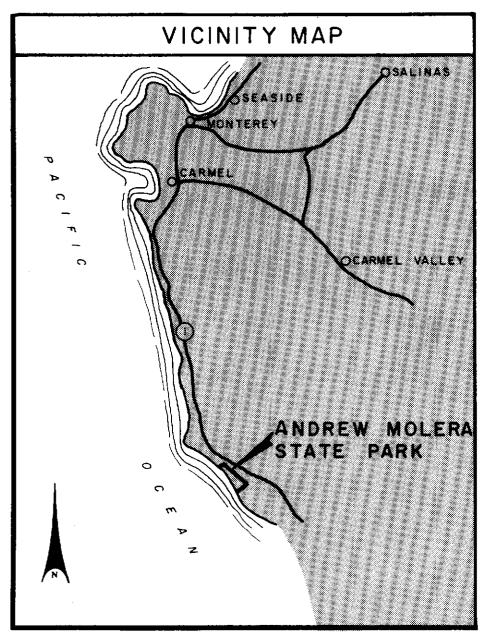


FIGURE 1

INTRODUCTION General Description

Andrew Molera State Park is a coastal park in the Big Sur region of California. Its 2,154 acres are bordered on the east by Highway 1 and on the west by the Pacific Ocean. Monterey is only thirty miles north, but difficult access along the narrow and winding Highway 1 and generally steep topography have kept the region along the Big Sur coast isolated. The regional quality and scenic values of this portion of the California coast are nationally renowned and, despite the difficult access, draw thousands of tourists yearly.

The Big Sur region has long been recognized as unique; many have fought to keep its original primitive beauty. Traversing the 100 miles of Big Sur from Carmel to the historic castle of William Randolph Hearst, Route 1 ties together coastal dunes, sunny meadows, pastured hillsides, and the most southerly stands of California redwoods. Billboards have been outlawed along the Big Sur stretch of Highway 1 since construction started in the early 1920s. But the integrity of the roadway is still a matter of concern. The State Coastal Plan of the Coastal Zone Commission calls for the designation of the Big Sur Parkway: "Highway 1 between Carmel River and San Simeon...should be kept a scenic two-lane highway... Through legislative action, these segments of Highway 1 should be designated as the Big Sur Parkway and would link many other existing and planned park units... These portions of Highway 1 should be viewed as lineal parks."

Big Sur is not only an area of exceptional natural beauty but also an area with significant historical background. The early Spaniards of Monterey referred to this region as 'El Sur,' or the South, and the two main streams as 'El Rio Chiquito Del Sur,' or the Little Sur River, and 'El Rio Grande Del Sur,' or the Big Sur River, which empties into the Pacific Ocean through Andrew Molera State Park.

Since the area was so rugged, the only communication with the outside was by horseback and later by stagecoach. The old stagecoach road can still be found paralleling the Big Sur River. The completion of the Carmel-San Simeon Highway in 1937 opened the area to tourists and made it nationally renowned.

The Molera Ranch has a history dating back to 1834 when it was a part of the 8,949-acre 'Rancho El Sur', Ranch of the South. The ranch was a Spanish land grant given to Juan B. Alvarado in 1834, but was later confirmed to Juan B. R. Cooper by the United States.

The park contains a wide range of terrain and vegetation. The Big Sur River flows for nearly 3.5 miles through the park and then empties into the Pacific Ocean. The changing course of the river has created 540 acres of river flats within the park. A small but ecologically significant lagoon has been formed by the river at its mouth. The park's coastline boundary extends from the lagoon southward $2\frac{3}{4}$ miles almost to Cooper's Point. The coastal headlands rise abruptly 1,200 feet from the thin strip of sand and rock formations fronting directly on the ocean.

The beach areas adjacent to the lagoon are the most heavily used due to their accessibility from the present walk-in campground and Highway 1. The northern beach is available at all times of the year; the southern portion is accessible only during times of low river flow, since no all-weather river crossing exists. The southern beach areas are further cut off by high tides.

The coastside areas of the park lie west and southwest of the Big Sur River. A large percentage of the park's acreage is essentially inaccessible for the majority of the year since the only access during high-river-flow months is by fording the river on foot (or in vehicles with high clearance) or by hiking 5 miles north from the U.S. Forest Service's Pfeiffer Beach.

The major use areas in the park are confined to the river flatlands adjacent to the Big Sur River and the beach areas surrounding the river outfall. The plan for development will retain this emphasis on the river as a major defining element. The walk-in campground lies on an upper flat a few hundred yards from the river and a short walk from Highway 1. An administrative housing area, approached directly from the highway by a short access road, is comprised of the Molera farmhouse and four trailers that currently house personnel from Andrew Molera and Pfeiffer Big Sur state parks.

The state park is within the zero-to-one-hour travel time zone from the Monterey area and the one-to-two-hour travel time zone from San Francisco.



RESOURCES ANALYSIS

RESOURCES ANALYSIS

The Resources Analysis is based on the Resource Inventory prepared by the Resource Management and Protection Division, Department of Parks and Recreation. Interested parties may obtain copies of the *Resource Inventory Report* by contacting the Design and Construction Division, P.O. Box 2390, Sacramento, California 95811. The report provides all of the natural and cultural resource data used for this analysis.

Natural Resources

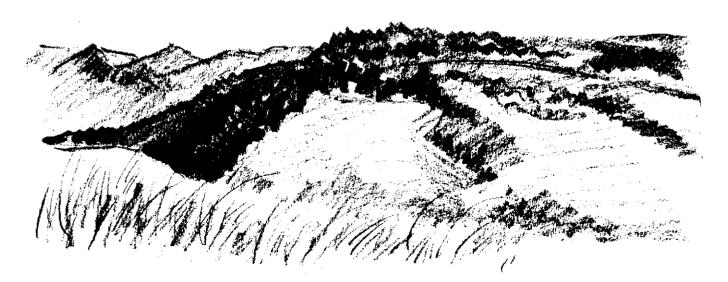
The natural and cultural resources of Andrew Molera State Park outlined and analyzed in the following pages provide the background for the allowable use intensity and general development plans.

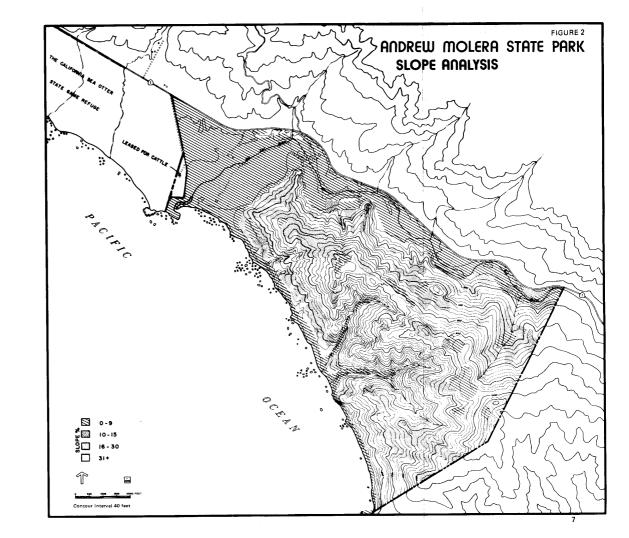
The primary natural resource areas of Andrew Molera State Park are:

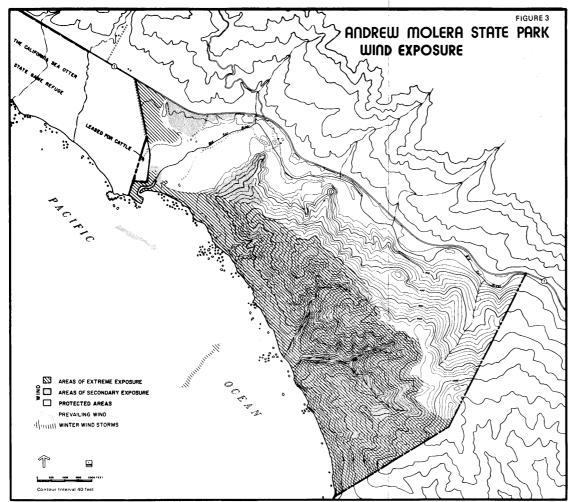
- o The Big Sur River The river flows year-round and has exceptional beauty.
- o The tidal lagoon at the river's mouth A fragile ecosystem is contained in the tidal lagoon.
- o Beach area A narrow stretch of rugged coastline and beach extends the length of the park.
- o The inland flats These flat meadows adjacent to the natural watercourse are the most suitable for facility development; the existing walk-in campground and staff housing are located on river flats.
- o The coastal uplands Approximately three-fourths of the park is in this category. Southwest of the riverbed, the uplands form the Pfeiffer Ridge. The east slope of the ridge, an important scenic feature of the park, is forested with coast redwood, Douglas fir, and tan oak with a dense understory of plant material.

Slope Analysis

The major portion of the park (67 percent) has a gradient in excess of 20 percent, and a large proportion of those areas with gradients over 20 percent is inaccessible. Areas of steepest slope should be reserved for hiking and fire roads necessary for park protection. Facility development should be located in areas with gradients of 0-10 percent (25 percent). Figure 2 is a graphic analysis of the slopes of various areas in the park.







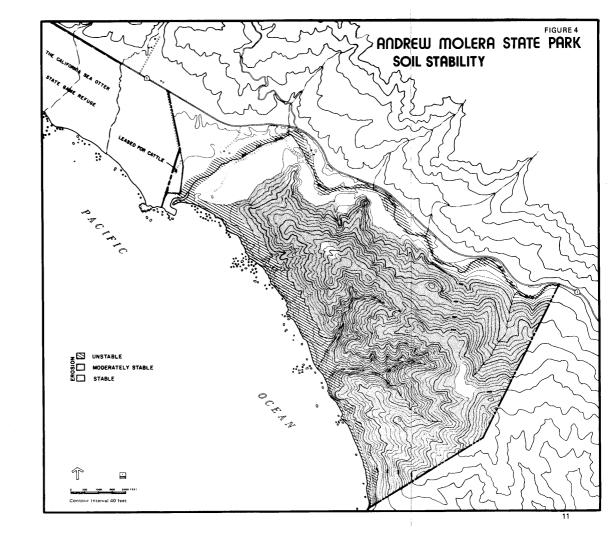
Wind Exposure

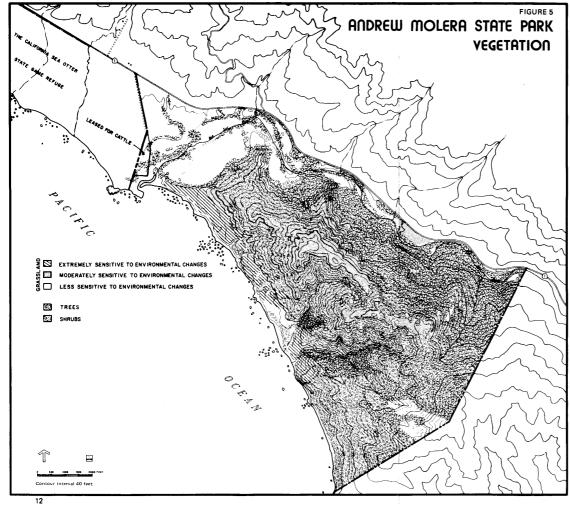
High winds are common along the Big Sur coastline. Areas of extreme exposure can be uncomfortable, especially for recreation activities such as picnicking or camping. Areas of high and secondary exposure would be least suitable for facility development, protected areas the most suitable. The areas of different wind exposure are presented in Figure 3.

Soil Stability

The major portion of the Molera property is underlain with Franciscan sandstone and shale. These areas are generally well-cemented and resistant to erosion. However, from the standpoint of potential landsliding, these areas present serious problems. Any road cuts, trails, or other development should be carefully designed for this unstable condition.

The greatest potential erosion hazards exist in the river gravel, the stream-deposited sands, gravels, and boulders along the course of the Big Sur River. Although older gravel sands or alluvium are generally more compacted than the more recently deposited alluvium, they are still easily erodible when exposed. Figure 4 presents a summary of the soil stabilities of this area.





Vegetation

From the ecological standpoint, Andrew Molera State Park occupies a transition zone in which elements of three landscape provinces occur. This unit has elements of the Redwood, Coastal, and Sierra Foothill and Low Coastal Mountains Landscape Provinces.

A diversity of plant communities is found within this park. A list of these with just a few examples of the plants found in each is given below.

Plant Community	Representative Plants								
Grassland	Annual hair grass, giant ryegrass (natives) wild oats, rattlesnake grass, ripgut grass								
Coastal Sage Scrub	California sagebrush, black sage, lupines								
Coastal Chaparral	Chamise, toyon, scrub oak								
Mixed Evergreen Forest	Tanbark oak, coast live oak, California laurel								
Redwood Forest	Coast redwood, madrone, tanbark oak								
Riparian	Sycamore, alders, Pacific blackberry								
Freshwater Marsh	California tule, horsetails, rabbitfoot grass								
Coastal Strand	Sand verbena, eriogonum, lupines, ice plant								

There are no rare and endangered plant species known to occur within this park. However, at least one plant species found here, Hill Clarkia (Clarkia bottae), is a species endemic to Monterey County. Figure 5 presents an analysis of the vegetation of Andrew Molera State Park.

Wildlife

The various plant communities described in the previous section provide habitats for a number of species of wild mammals, including black-tailed deer, gray fox, bobcats, spotted skunks, brush rabbits, raccoons, and weasels.

Similarly a variety of marine animals live in the coastal waters, and the area supports numerous birds.

Although there are no rare and endangered species that inhabit Andrew Molera State Park, several (gray whale, right whale, blue whale) have been sighted off-shore and two (clapper rail and peregrine falcon) have been sighted in this general area. The brown pelican stops here during its migrations.

Scenic Values

This park unit provides scenic diversity and interest for the visitor. Approaching from the north along Highway 1, the traveler is treated to an outstanding panorama that begins in the immediate foreground with level to gently sloping grasslands that soon fall away to the alluvial flats and streamside woodlands bordering the Big Sur River. Looking into the distance the traveler sees, rising above the river, the mountainous portion of this park with its interesting vegetation mosaic of grassland, chaparral, and mixed evergreen, and strips of coast redwood, the latter occurring mostly along streams and in canyons with some water source. Framing this scene is the Pacific Ocean to the west and, to the east, the slopes of the Santa Lucia Mountains rising steeply to elevations of 3,500 feet and above. Several prominent peaks may be seen, including Pico Blanco (3,709 feet), about one mile to the north; Post Summit (3,455 feet), about one-half mile to the east; and Manuel Peak (3,500 feet), approximately two miles to the east.

The visitor is treated to a landscape picture in which color, texture, line, and form assume different significances at different seasons of the year. In the fall and winter, following rains, the green grass appears as a fine green texture interspersed among the coarser textures of the deeper greens and browns of the surrounding chaparral and mixed evergreen trees. In the drier seasons of summer and early fall, the straw color of the dry grasslands stands out in sharp contrast to the greens and browns of the nearby chaparral and arboreal cover.

Man has done relatively little to mar this highly scenic landscape. Highway 1, barbed-wire fencing, and the ranch buildings within this unit are the most prominent evidence of man's encroachment on the scene. Some land clearing and construction of ranch facilities were done along the river flats for ranching purposes, but since cessation of ranch operations, the evidence is rapidly being masked by invading grasses and brush.

Figure 6 indicates the areas of high visual qualities for the park unit based on the U.S. Forest Service visual management system.

Cultural Resources

The primary cultural resource values are:

- o Seven known archeological sites two with known midden deposits
- o A building constructed of hand-split redwood timbers located in the eucalyptus grove probably an original ranch structure
- o Remnants of the old stagecoach road paralleling the Big Sur River.

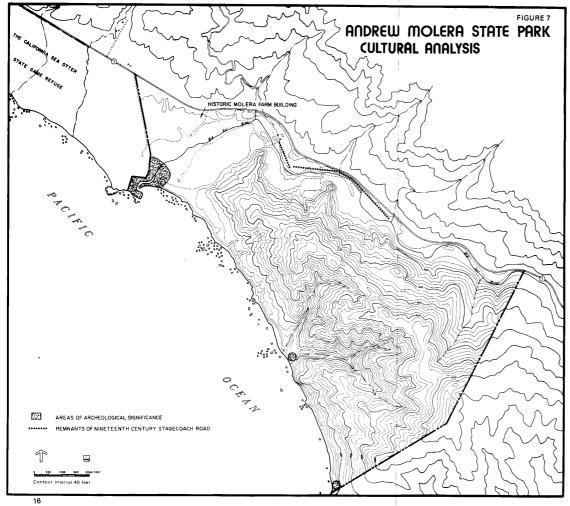
Archeological Resources

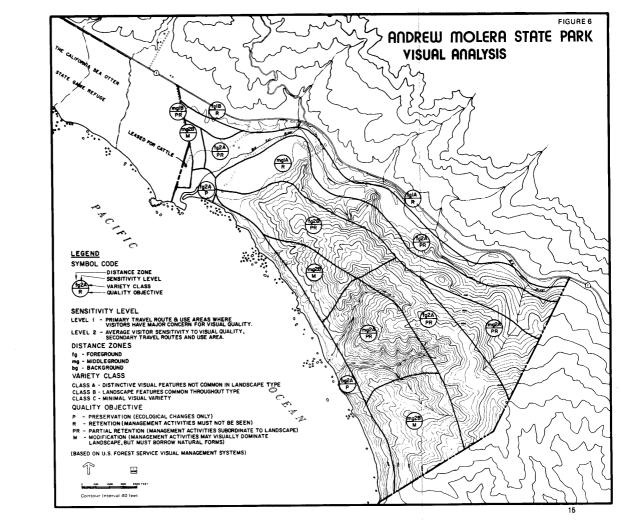
The Big Sur region was inhabited in prehistoric times by the little-known Esselen group. Though now extinct, they are considered to be a remnant Hokan-speaking group who at one time inhabited a much larger area. The Esselen territory encompassed the area along the coast from the Big Sur River to Pt. Lopez and east to the crest of the Santa Lucia range.

The population of the Esselen at the time of the Spanish settlements was only about 500 people. The bulk of these were taken to the Carmel Mission or to Mission Soledad and thus the tribe lost its identity as an aboriginal group by the early 1800s.

Seven archeological sites are located within the boundaries of Andrew Molera State Park. Five of these are located at the mouth of the Big Sur River and two are located on the marine terraces south of the river's mouth.

Though the archeological survey of the Molera property revealed only seven sites, it is possible that more sites remain undiscovered in the central and southern portions of the area. Coastal versus inland habitation patterns are not well known in this region of California.





Historical Resources

The Big Sur area long remained untouched due to the ruggedness of the coastline. The only communications with the outside world was by horseback and later by stagecoach. The old stagecoach road can still be found paralleling the Big Sur River, making a good walking path in the area where it still exists.

Some of the first visitors in the 1800s included Jack London, traveling all the way from the Valley of the Moon on horseback. In 1879 Robert Louis Stevenson went to a ranch in the Big Sur region for his health.

The Big Sur area was opened up to large-scale lumbering operations with the completion of the narrow gauge Salinas Valley Railroad in 1878. Virgin stands of redwood were cut as early as the 1830s. With the exception of a few trees in Pfeiffer Big Sur State Park, nearly all the existing redwoods are second growth stands.

The cutting of the tanbark oak (lithocarpus densiflora) was also an important part of the lumbering industry until 1868 when all the trees in the area were clear cut. Second growth timber is now coming back. The bark, used for tanning leather, was shipped out of Partington's Landing, eight miles south of Pfeiffer Point.

Although the area had been opened up through lumbering operations, it was still one of the least-known regions of the United States until the opening of the Carmel-San Simeon Highway in 1937. The highway is 97 miles in length and took 14 years to complete, finally opening up the Big Sur coastline to motorized traffic.

History of the Molera Ranch: The Molera Ranch has a history dating back to 1834 when it was part of the 8,949-acre 'Rancho El Sur', Ranch of the South. Rancho El Sur was granted to Juan B. Alvarado in 1834, but was later confirmed to Juan (John) B. R. Cooper by the United States.

Captain John B. R. Cooper, a native of England and half brother of Thomas Oliver Larkin, came to California in 1823. Cooper married Dona Encarnacion Vallejo, daughter of Ignacio Vicente Vallejo, a prominent Spanish-Californian, and settled in Monterey to become a prosperous land owner, shipper of goods, and one of the leading citizens of Monterey. It was largely through his influence that his half brother, Thomas Larkin, was induced to come to California. Larkin later became the first and only U.S. Consul to Mexico in Monterey. Cooper also owned the Moro Cojo Ranch and other large grants of land in Monterey and Sonoma counties.

Upon Cooper's death in San Francisco in 1872, the property was given to his son, John Baptist Henry Cooper. Upon the death of the son, the property was divided equally between Mrs. Cooper and her two daughters, Mrs. Wohler and Mrs. Frances Amelia (Cooper) Molera.

Frances Amelia Cooper married Eusebius Joseph Molera in the spring of 1876 at Vallejo, California. From this union two children were born — Andrew Molera and Frances M. Molera — neither of whom married. The daughter was the last of this distinguished family and the last owner of both the Molera Ranch and of another unit of the State Park System, the Cooper-Molera Adobe in the city of Monterey. Figure 7 presents the cultural resources of the park area.

Recreational Resources

The spectacular beauty of the Big Sur region is well known. At Andrew Molera State Park the rugged coastline and the surrounding mountainous terrain afford the visitor an outstanding environment for camping, hiking, horseback riding, picnicking, bird-watching, fishing, and beachcombing. The undeveloped nature of the area is particularly attractive to many people.



RESOURCE MANAGEMENT PLAN

RESOURCE MANAGEMENT PLAN

Introduction

Andrew Molera State Park is situated along the coast approximately 30 miles south of Monterey. This is a region of very high ecological and botanical interest with its plant communities representative of several landscape provinces, including the Coast Redwood, Coastal Strip, Sierra Foothill and Low Coastal Mountains Landscape Provinces. The vegetation types here include grassland, chaparral, mixed evergreen forests, coniferous forest, riparian woodlands, freshwater marsh, and strand.

This unit embraces a landscape of great scenic diversity and beauty, essentially unimpaired by man. There are outstanding panoramas that include a mountainous landscape of grassland on Pfeiffer Ridge rising dramatically above the coastal sage and bluffs of the coastline below. This upland vegetation makes an interesting and varied mosaic with the chaparral and mixed-evergreen forest of the east slopes. Punctuating this mosaic in several of the sheltered, west-facing canyons and at one location on the ridge top are stands of coast redwoods. The redwoods become even more prevalent on the east slopes away from the sea breezes.

The coast redwood stands here have special ecological significance because this species is near the southern limit of its distribution. Furthermore, it is ecologically noteworthy that this general area has numerous plants which are at either their most southerly or northerly distributional limits.

The Big Sur River, a year-round stream, which flows through the entire length of this unit, is an important scenic and recreation resource. Lining the river is a riparian forest composed mainly of California sycamore, white and red alders, black cottonwood, and arroyo willow. On the river flats at the upstream portion there occur small stands of coast redwood.

The beach area and the adjoining bluffs below the coastal terraces are an outstanding scenic and recreation resource.

The cultural resources within this unit include a number of archeological sites on the coastal terraces. These sites are described fully in the Resource Inventory for this unit. A pioneer cabin made of square, hand-hewn logs exists in a grove of eucalyptus northwest of the Big Sur River. This is a rare example of early pioneer architecture which should be preserved and protected.

Resource Use

The only public use facilities at this unit are a walk-in campground along the Big Sur River and a few trails, some of which double as firebreaks and fire roads. The natural and cultural resources of this unit provide the basis for a number of outdoor recreation activities including camping, picnicking, hiking, biking, nature study, fishing, and photography. Except for poor drainage and a high potential for soil compaction in some areas, the river flats are quite suitable for facility development. Due to the generally steep topography and soils very sensitive to erosion, upland areas have severe limitations for recreation development and use.

Declaration of Purpose

The purpose of Andrew Molera State Park is to assure the perpetuation, in an essentially natural condition, of the grasslands, forest, streamsides, freshwater marsh and lagoon, and coastal beaches, as well as the associated scenic values of this park, all considered as an ecological entity; to make possible the preservation of the archeological and historical values within this unit; and to provide for public use, enjoyment and understanding of these resources through compatible outdoor recreation activities.

Declaration of Management Policy

The primary objective of management at Andrew Molera State Park is to manage the scenic and natural resources so as to protect, preserve, and perpetuate these resources for the enjoyment of present and future generations. Management actions will be undertaken only to restore pristine conditions, or for purposes of countering the negative influences of modern man.



ALLOWABLE USE INTENSITY PLAN

ALLOWABLE USE INTENSITY

The allowable use intensity plan delineates areas within the boundaries of the park that are ecologically suitable for various intensities of use. It establishes the maximum number of people that an area can accommodate without unduly compromising the resource values of that area.

The allowable use intensity plan is based on the conclusions developed through the resource analysis. The development of facilities, the relationship of these facilities to the environment and the impact of the user pursuing a specific recreation activity are the factors that have meaning in relation to use intensity. Use intensity is considered here to be composed of two factors: density and frequency. Density refers to the number of people on one acre of land and frequency refers to the number of days in a year that the land is used.

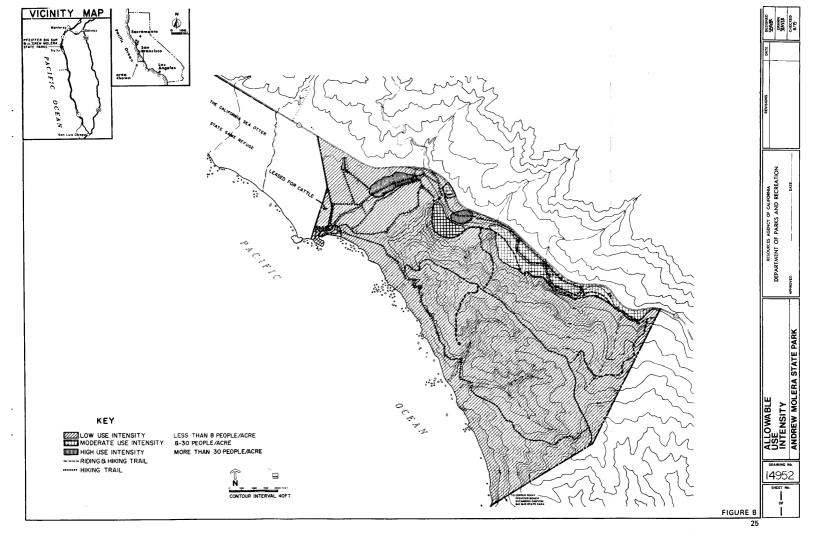
An analysis of density at developed recreation areas reveals that there are two zones of public use. The first is a "specific use zone" in which a specific activity will take place. The second is a "multiple use zone", which provides space for recreation activities related to a specific use. For example, the specific use zone in which picnicking takes place is the area immediately adjacent to the picnic table; the multiple use zone required for picnicking includes open space as the primary value, plus space for informal sports and games, buffer space to separate picnic tables from parking lots and traffic or other conflicting activities, and space for parked cars. The size of the multiple use zone will depend on both the kind of specific use being considered and the number of users the facility provides for. Without the multiple use zone for related activities, a specific use zone with picnic tables would not satisfactorily fulfill its purpose as a picnic facility. Table 1 indicates the specific use zone density factors and an appropriate minimum space standard for the multiple use zone for each activity at Andrew Molera State Park.

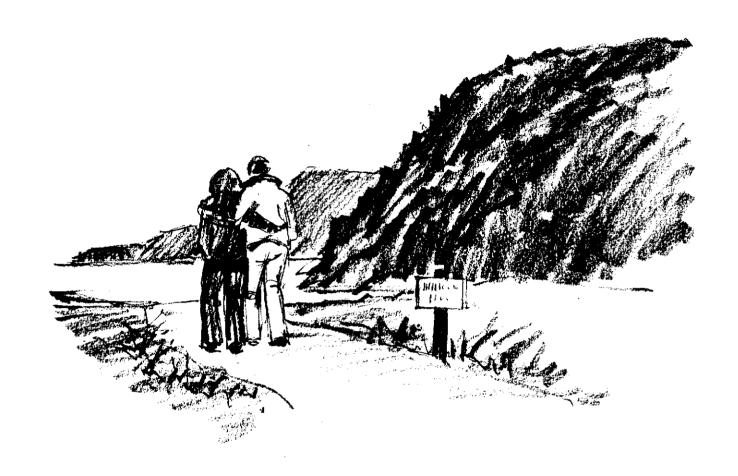
Frequency is clearly a critical factor for high density types of recreation such as very large group picnics. For example, a festival held on just one day of each year would allow 364 days for the environment to recover.

High Use Intensity. Thirty to fifty people per acre with a use frequency of 180-365 days/year.

Moderate Use Intensity. Eight to thirty people per acre with a use frequency of 120-240 days/year.

Low Use Intensity (less than eight people per acre). Low use intensity areas contain fragile, rare or unique resources that may be destroyed by higher intensity use, or they may contain hazardous areas, or they are inaccessible. Typical allowable frequency of use varies according to hazards or fragility of the area and could range from one day a year to maximum frequency of 365 days a year.





GENERAL DEVELOPMENT PLAN

GENERAL DEVELOPMENT PLAN

The majority of the park will be maintained in a natural state to preserve the scenic qualities of the Big Sur coastal region. Proposed development is minimal, but provides for picnicking, hiking, riding, beach activities, with isolated areas for walk-in campgrounds. All use areas except the "potential public use areas" have a history of use, either since the land has become a state park or during its use as a Molera family farm. Vegetative planting around the use areas will enhance the scenic quality of the park, provide shade, and afford wind protection for the park visitor.

Circulation Needs

Access to Andrew Molera State Park is directly from State Highway 1. Existing pedestrian access is made at any number of points along the highway which fronts the entire eastern border of the parcel. Primary pedestrian, bike, and equestrian entrance points are the paved road to the original farmhouse, the existing trail to the proposed picnic area, and three pedestrian gates along the northern section of the Highway 1 fence line.

Vehicular access at present is limited to administrative use of the farmhouse road. Limited sight-distance along Highway 1 makes public use of the farmhouse road dangerous. Planned vehicular access will bring cars off Highway 1 in the northern portion of the park, the only area with sight-distance that completely satisfies safety standards. Beach parking will be accommodated on a flat at the base of a steep slope out of view from the highway; the visual integrity of the coastal plain will therefore be maintained. Road access across the meadow to the parking will be aligned with as little visual intrusion as possible.

The primary access problem within the park is the Big Sur River. No permanent river crossing exists; temporary footbridges are placed across the river during summer months when the river level is low. Vehicular crossing for fire patrol purposes is accomplished by four-wheel drive vehicles and is possible only during periods of low river flow. A permanent all-weather vehicular crossing for service vehicles will also provide pedestrian access for walk-in public access.

Park access will be predominantly by foot in keeping with the primitive quality of the area. Existing fire roads can serve as equestrian and bike routes. A network of fire roads laces the park and can adequately serve riding and hiking needs.

The following sections of this chapter will describe the total development planned.

Planned Development

Trail Camp

A hike-in campground on the site presently being used for a trail camp will contain a maximum of fifty campsites. Two hundred people would be accommodated using an average of four people per site.

Sanitary facilities will be provided along with fire rings. The area has flat ground with good wind protection, a necessity in this area of strong winds. The campground is hidden from the highway and surrounding area by grade separation and by the riparian vegetation growing along the riverbed.

Picnic Area

The proposed picnic area is located adjacent to river beaches and meadows near the proposed parking area. Century-old sycamore and oaks within the meadow grasses provide ample shade and will enhance the quality of picnic facilities. The proposed picnic area is on the trail to the beach and will accommodate an appropriate proportion of the 300 people using the parking facility.

Beach Area

The main attraction within the park is the beach area adjacent to the lagoon. This is the terminus for trails leading from the proposed picnic area, parking area, and the trail camp. The Big Sur River forms a small estuary at its outfall into the Pacific Ocean. The estuary contains a marshy area and an ecological system that should be kept intact. However, this is the same area that is attractive to park visitors for beach activity. Therefore, a lower than normal density of beach use (a maximum of one hundred people in the immediate vicinity of the river outfall) is recommended. This plan also proposes a natural preserve at the lagoon area. Approximately one mile of beach from the river estuary southward is accessible to hikers. Further south, the beach is cut off at places by high tides and rock outcrops. These southern beach areas would be accessible only during periods of low tides or by foot from the bluff 500 feet above. They offer beach areas off the beaten track for persons who enjoy secluded isolated areas.

Potential Public Use Areas

In this day of quickly changing recreation trends, it is impossible to predict what the public needs might be 20 years from now. This plan has located areas for future expansion without specifying precise use. The amount of use will be in accordance with the "Allowable Use Intensity" section of this plan. It is possible to accommodate 450 people within the potential public use areas in accordance with the "Allowable Use Intensity" section.

Interpretive Facilities

The cultural and natural features of the park will be presented to the public through a small historic interpretive center, by interpretive paneling, and through a self-guiding nature trail.

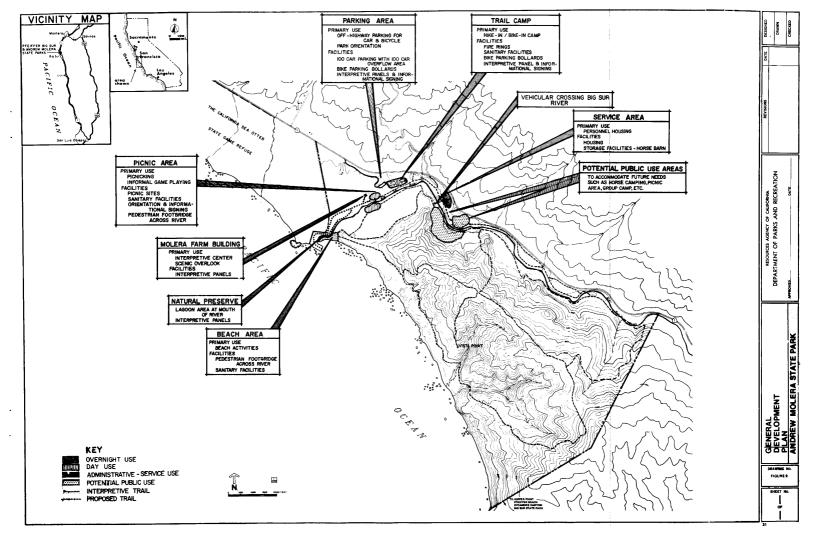
The cultural history of the area will be told at or in the existing pioneer cabin located in the eucalyptus grove adjacent to the new picnic area. The building is possibly one of the original ranch structures.

The natural history features of the park will be explained and pointed out through a self-guiding trail (with brochure) originating at the parking area and running roughly parallel with the Big Sur River to its outfall into the Pacific Ocean. The story told through this trail will cover the entire spectrum of natural history, geology, landform evolution, flora, fauna, and ecosystems existing in the region.

To supplement the self-guiding trail and the historic interpretive center, several interpretive panels will be strategically placed within the park pointing out interesting features not covered by either of the above facilities. Orientation maps and park regulations will be posted at the parking area.

Summary of the Total Number of Visitors the Long-Range General Development Plan Will Accommodate

		PEO	PLE PER C	CAR	TO	TOTAL PEOPLE							
Type of Facility	Number of Cars	Max.	Min.	Anticipated Average	Max.	Min.	Anticipated Average						
Potential Public Use Areas	150	5	1.5	3	750	225	450						
Picnic and Beach Parking	100	5	1.5	3	500	150	300						
Overflow Parking	100	5	1.5	3	500	0	0						
Hike-In Camp	0	0	0	0	400	0	200						
Sum Total Cars Sum Total People	350				2,150	375	950						





ENVIRONMENTAL IMPACT REPORT

Environmental Impact of the Proposed Action

The ultimate development proposed at Andrew Molera State Park will provide picnic sites, campsites, roads, sanitary facilities, a drinking water system, utilities, plantings, and interpretive facilities.

The park unit's basic resources are the sandy ocean beach, the Big Sur River and its estuary, the inland river flats, open meadows, Pfeiffer Ridge, and scenic open space.

The unit's resources will be more available to visitors by developing a traffic channelization lane — a center lane for left hand turns on Highway 1 — an access road, and off-highway parking.

The probable impacts of the development on the environment are:

- o Traffic channelization lane will necessarily widen Highway 1 at the proposed entrance.
- The road to the 100-car, unpaved parking lot with 100-car overflow parking will be partially visible from the highway. The parking area will occupy approximately two acres and its surface will consist of decomposed granite over a gravel base.
- o The new development will attract additional people. The capacity of the use areas is 950.
- o Paved areas will inhibit water penetration into the soil.
- o Increased recreation use adjacent to the river will affect the riparian habitat, especially at the river's mouth.
- o Plantings will augment existing vegetation, create additional wildlife habitats, and make minor changes in the visual quality of the area.

Adverse Environmental Effects Which Cannot be Avoided

The unavoidable adverse environmental effects which will be caused by this development are:

- The road to the parking lot will not be completely hidden and will create some visual disturbance along scenic Highway 1.
- o Motor vehicles in this scenic area will create visual and auditory pollution.
- People will create litter.
- o Park users will have ready access to the very extensive southwestern portion of the park, on the southwest side of the Big Sur River, on a permanent rather than seasonal basis. The human impact on the resources will be increased, especially in the lagoon-marsh area, during peak attendance periods.
- o The potential for wildfires will be increased and their probable destructive effects due to the increasing number of park visitors.
- o Some energy and resource use related to services will increase.

Proposed Mitigation Measures

Mitigation measures proposed for minimizing environmental impact are as follows:

- O Automatic shut-off equipment will be used on the water systems to conserve the water resource.
- o Firebreaks will be maintained that will reduce the impact of wildfires that may occur within each use area.
- O Slope stabilization measures will be taken wherever necessary to prevent excessive runoff. Road construction will include culvert crossings to protect natural drainages. If feasible, bridge crossings will be used. Trail erosion will be controlled by keeping foot traffic within established rights-of-way.
- o Plantings of indigenous species within the use areas will minimize erosion, enhance the native flora and fauna, and preserve visual integrity.
- Scenic amenities will be preserved by careful siting of use facilities.
- An interpretive program designed to educate visitors to the ecological importance of the lagoon area and known existing archeological sites will minimize, as fully as possible, additional human impact due to increased visitation. Closure of the immediate lagoon area may be necessary as a temporary measure, if so determined by the Resource Management and Protection Division.

Alternatives to the Proposed Action

The alternative of no camping would have the effect of fewer people accommodated at this park unit. The park received 33,264 visitors in the 1972-73 year period, with concentrated use in the summer months. The park, as it is, is unable to satisfy the camping and picnicking demand. This has lead to illegal and uncontrolled use and was the reason for the "Molera" fire.

The possibility of increased camping, especially recreation vehicle camping, either in the present site of the walk-in campground or in the large meadow across the Big Sur River would mean an augmentation in the utilities provided, increased impact on the natural resources of the park, and increased noise, air, and visual pollution. The visual integrity of the meadows along the Big Sur River would be significantly changed.

No camping has been proposed in the beach area due to the limitation of size and serviceability.

The location of the potential public use areas was selected for several reasons. The area encompassing the livestock corrals and beyond is hidden from highway view and from the walk-in campground. It has a good view of the Los Padres Mountains looking towards Pfeiffer Big Sur State Park. It is a large flat area close to the Molera farm entrance currently being used for administrative access. There is direct vehicle access existing from this entrance to the potential public use areas. All other alternative sites have fewer amenities.

Several sites were considered for parking. The northernmost stretch of highway was the only one suitable for entry to the park due to its having adequate sight-distance. The parking area was chosen for several reasons: it has natural vegetative screening; it has access to the existing trail to the beach and to the trail camp; it is between the picnic area and trail camp; and it is a flat area of 2 percent grade. No other sites would combine those qualities.

The administrative housing area will remain where it is presently located and includes a large farmhouse and four trailers. A housing shortage in the area dictates the provision of housing for personnel from both Andrew Molera and Pfeiffer Big Sur state parks. The alternative of using the administrative housing for public use would necessitate providing additional accommodations somewhere else in the park for park personnel.

Short-Term Use of Environment vs. Long-Term Productivity

The land has been acquired for public use as a state park. None of the proposed developments will take anything away from long-term use of the land for these purposes. The area will be protected from the adverse effects of public use by standard state park management procedures. Fresh water is the only resource that will be removed.

Irreversible Environmental Changes

No irreversible environmental changes are predictable.

Growth-Inducing Impact

The proposed project has little potential for inducing growth. Development of park facilities will satisfy recreation needs and could slightly augment the tourist population. Private auxiliary developments near the park, such as motels, campgrounds or grocery stores already exist to the south and service park visitors for both Pfeiffer Big Sur and Andrew Molera state parks.

The general development plans call for a low-profile development with emphasis on a primitive camping situation with alternative transportation modes other than automobile; catering to hikers, bike riders, and other informal travelers.

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